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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,719	06/23/2003	Tine Holland Frimann	433.015	8753
20311 75	590 02/07/2005		EXAM	INER
MUSERLIAN, LUCAS AND MERCANTI, LLP			LE, EMILY M	
475 PARK AV 15TH FLOOR	475 PARK AVENUE SOUTH	ART UNIT	PAPER NUMBER	
NEW YORK,	NY 10016		1648	

DATE MAILED: 02/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
	10/601,719	FRIMANN, TINE HOLLAND	
Office Action Summary	Examiner	Art Unit	
	Emily Le	1648	
The MAILING DATE of this communication	n appears on the cover sheet v	with the correspondence address	
od for Reply			
A SHORTENED STATUTORY PERIOD FOR R THE MAILING DATE OF THIS COMMUNICATI	()NI		
 Extensions of time may be available under the provisions of 37 C 	FR 1.136(a). In no event, nowever, may a	a reply be timely filed	
after SIX (6) MONTHS from the mailing date of this communicate. If the period for reply specified above is less than thirty (30) days.	, a reply within the statutory minimum of the	nirty (30) days will be considered timely. ONTHS from the mailing date of this communication.	
 If NO period for reply is specified above, the maximum statutory if Failure to reply within the set or extended period for reply will, by Any reply received by the Office later than three months after the 	statute, cause the application to become	ABANDONED (35 U.S.C. § 133). if timely filed, may reduce any	
Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	maining date of this continuincation, even	, ,	
atus			
1) Responsive to communication(s) filed on	02 November 2004.		
2a) This action is FINAL 2b) 2b)	This action is non-final.		
3) Since this application is in condition for a	llowance except for formal ma	atters, prosecution as to the merits is	
closed in accordance with the practice ur	nder <i>Ex par</i> te Quayle, 1935 C	.D. 11, 453 O.G. 213.	
sposition of Claims			
4)⊠ Claim(s) <u>1 and 3-13</u> is/are pending in the	application.		
4a) Of the above claim(s) 13 is/are withdr	awn from consideration.	•	
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1 and 3-12</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction	and/or election requirement.		
pplication Papers	ominor		
9) The specification is objected to by the Ex 10) The drawing(s) filed on is/are: a)	ammer. □ accepted or b)□ objected	to by the Examiner.	
Applicant may not request that any objection	to the drawing(s) be held in abe	evance. See 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the	correction is required if the draw	ring(s) is objected to. See 37 CFR 1.121(d).	
11) The oath or declaration is objected to by	the Examiner. Note the attac	hed Office Action or form PTO-152.	
riority under 35 U.S.C. § 119	foreign priority under 25 H S (C. § 119(a)-(d) or (f).	
12) Acknowledgment is made of a claim for	ioreign priority under 55 0.5.	0. 3 1.10(%) (%) 0. (/).	
a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority doc	ruments have been received.		
1. Certified copies of the priority doc2. Certified copies of the priority doc	suments have been received i	in Application No	
2. ☐ Certified copies of the priority doc3. ☐ Copies of the certified copies of the	he priority documents have be	een received in this National Stage	
application from the International	Bureau (PCT Rule 17.2(a)).		
* See the attached detailed Office action for	or a list of the certified copies	not received.	
Jee me addened detailed embe design to	·		
Attachment(s)	🗖	iew Summary (PTO-413)	
) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO)	Paper	No(s)/Mail Date	
2) Notice of Draftsperson's Patent Drawing Review (F10)	O/SB/08) 5) Notice	e of Informal Patent Application (PTO-152)	

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DETAILED ACTION

Election/Restrictions

1. Newly submitted claim 13 is directed to an invention that is distinct from the invention originally claimed. The newly submitted claim is directed a method of using a vaccine composition, whereas, the originally claimed invention is a vaccine formulation. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 13 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Status of Claims

2. Claim 2 is cancelled. Claims 1 and 3-13 are pending. Claims 1 and 3-12 are under examination.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1, 3-5 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Ng et al., WO 98/34594, published 08/13/1998.

Applicant submits:

Ng et al. patent does not anticipate the claimed invention because the teaching of Ng et al. relates to a combination of preservatives, which must use L-

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histidine as a buffer to keep the vaccines at a pH of 7.0. Applicant's composition does not require L-histidine as a buffer to keep the pH at 7 and lacks the benzyl alcohol that is required by the reference. The terminology "consisting essentially of" has been used to exclude the presence of these two ingredients from Applicants' vaccine formulations. Applicant's compositions are not merely a combination of two compositions, each of which is taught by the prior art since the data in the application filed on pages 9-10 unequivocally shows the immunogenic effect of the vaccine when used to vaccinate guinea pigs and pigs and this combination could no way be ascertained form the Ng et al. reference.

Applicant's submission has been considered, however, it is not found persuasive. In the instant, Applicant's claimed invention remains to be anticipated by Ng et al. Ng et al. teaches the claimed vaccine formulation, which comprises an immunogen, pharmaceutically acceptable excipients, and the required combination of preservative that is instantly required of the claimed invention. The fact that the vaccine formulation of Ng et al. additionally comprises a buffer and an additional preservative does not render the teaching of Ng et al. as un-anticipatory to the claimed invention. Applicant's amendment to the claims to include "consisting essentially of" has been noted; however, the amended claims do not implicitly exclude the inclusion of the additional ingredients that Ng et al. teaches. Moreover, the ingredients, L-histidine as the buffer and benzyl alcohol as a preservative, are substances that would not materially affect the asserted novelty of the claimed invention.

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Furthermore, Applicant's attention is directed to claim 4 of the instant application. Claim 4 defines the pharmaceutically acceptable excipients that can be included with the claimed invention as buffers and preservatives. Thus, in accordance with the language set forth in claim 4, the L-histidine and benzyl alcohol of Ng et al. can also be regarded as excipients of the claimed invention.

Lastly, regarding Applicant's assertion that the immunogenic effect of the vaccine could no way be ascertained from the teaching of Ng et al., Applicant's assertion have no merit. Applicant has not provided any evidence that the vaccine formulation of Ng et al. is not immunogenic. Furthermore, as noted the Ng et al. teaches the same formulation as that of the claimed invention. Any properties described by Applicant, such as immunogenicity, is an inherent property of the vaccine formulation itself. Thus, the vaccine formulation of Ng et al. would necessarily be immunogenic.

Ergo, Ng et al. continues to anticipate the claimed invention.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 6 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ng et al. in view of Marciani, U.S. Patent No. 6080725, published 06/27/2000.

Applicant submits that the Ng et al. patent does not render obvious Applicant's invention. The Ng et al. reference relates to a combination of preservatives which must

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use L-histidine as a buffer to keep the vaccines at a pH of 7.0. Applicant submits that Applicant's compositions do not require L-histidine as a buffer to keep the pH at 7 and lacks the benzyl alcohol which is required by the reference. The terminology "consisting essentially of" has been used to exclude the presence of these two ingredients from Applicants' vaccine formulations. Applicant additionally submit that Applicant's compositions are not merely a combination of two compositions, each of which is taught by the prior art since the data in the application filed on pages 9-10 unequivocally shows the immunogenic effect of the vaccine when used to vaccinate guinea pigs and pigs and this combination could no way be ascertained form the Ng et al. reference taken in further view of Marciani et al., which only teaches that saponin can have an antimicrobial activity and can be used in vaccine formulation. Marciani et al. in no way overcomes the deficiencies of Ng et al., as discussed above.

Applicant's submission has been considered, however, it is not found persuasive. In the instant, Applicant is arguing against only one of the references that are used in the above rejection. MPEP § 2145, item no. IV, states, "Applicant cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co., Inc., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986)." In view of the guidance provided, Applicant's submission failed to provide why it is not obvious to use the teaching of both Ng et al. and Marciani et al.

Furthermore, contrary to Applicant's assertion, the teaching of Ng et al. is relevant. Ng et al. teaches a vaccine formulation, which comprises an immunogen,

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pharmaceutically acceptable excipients, and the required combination of preservative that is instantly required of the claimed invention. The fact that the vaccine formulation of Ng et al. additionally comprises a buffer and an additional preservative does not render the teaching of Ng et al. as irrelevant to the claimed invention. Applicant's amendment to the claims to include "consisting essentially of" has been noted; however, the amended claims do not implicitly exclude the inclusion of the additional ingredients that Ng et al. teaches. Moreover, the ingredients, L-histidine as the buffer and benzyl alcohol as a preservative, are substances that would not materially affect the asserted novelty of the claimed invention.

Additionally, Applicant's attention is directed to claim 4 of the instant application. Claim 4 defines the pharmaceutically acceptable excipients that can be included with the claimed invention as buffers and preservatives. Thus, in accordance with the language set forth in claim 4, the L-histidine and benzyl alcohol of Ng et al. can also be regarded as excipients of the claimed invention.

Lastly, regarding Applicant's assertion that the immunogenic effect of the vaccine could no way be ascertained from the teaching of Ng et al., Applicant's assertion have no merit. Applicant has not provided any evidence that the vaccine formulation of Ng et al. is not immunogenic. Furthermore, as noted the Ng et al. teaches the same formulation as that of the claimed invention, with the exception of limitations recited in claims 6 and 10-11. Any properties described by Applicant, such as immunogenicity, is an inherent property of the vaccine formulation itself. Thus, the vaccine formulation of

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Ng et al. would necessarily be immunogenic. Ergo, Ng et al. is relevant to the claimed invention.

7. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ng et al.

Applicant submits that the Ng et al. patent does not render obvious Applicant's invention. The Ng et al. reference relates to a combination of preservatives comprising methyl and propyl parabens, benzyl alcohol and 2-phenoxyethanol which must use L-histidine as a buffer to keep the vaccines at a pH of 7.0. Applicant submits that Applicant's compositions do not require L-histidine as a buffer to keep the pH at 7 and lacks the benzyl alcohol which is required by the reference. The terminology "consisting essentially of" has been used to exclude the presence of these two ingredients form Applicants' vaccine formulations. Applicant's compositions are not merely a combination of two compositions, each of which is taught by the prior art since the data in the application filed on pages 9-10 unequivocally shows the immunogenic effect of the vaccine when used to vaccinate guinea pigs and pigs and this combination could no way be ascertained form the Ng et al.

Applicant's submission has been considered, however, it is not found persuasive. Contrary to Applicant's assertion, the teaching of Ng et al. is relevant. Ng et al. teaches a vaccine formulation, which comprises an immunogen, pharmaceutically acceptable excipients, and the required combination of preservative that is instantly required of the claimed invention. The fact that the vaccine formulation of Ng et al. additionally comprises a buffer and an additional preservative does not render the teaching of Ng et

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al. as irrelevant to the claimed invention. Applicant's amendment to the claims to include "consisting essentially of" has been noted; however, the amended claims do not implicitly exclude the inclusion of the additional ingredients that Ng et al. teaches.

Moreover, the ingredients, L-histidine as the buffer and benzyl alcohol as a preservative, are substances that would not materially affect the asserted novelty of the claimed invention.

Additionally, Applicant's attention is directed to claim 4 of the instant application. Claim 4 defines the pharmaceutically acceptable excipients that can be included with the claimed invention as buffers and preservatives. Thus, in accordance with the language set forth in claim 4, the L-histidine and benzyl alcohol of Ng et al. can also be regarded as excipients of the claimed invention.

Lastly, regarding Applicant's assertion that the immunogenic effect of the vaccine could no way be ascertained from the teaching of Ng et al., Applicant's assertion have no merit. Applicant has not provided any evidence that the vaccine formulation of Ng et al. is not immunogenic. Furthermore, as noted the Ng et al. teaches the same formulation as that of the claimed invention, with the exception of limitations recited in claims 7-8. Any properties described by Applicant, such as immunogenicity, is an inherent property of the vaccine formulation itself. Thus, the vaccine formulation of Ng et al. would necessarily be immunogenic. Ergo, Ng et al. is relevant to the claimed invention.

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ng et al. in view of Allan et al. (U.S. Patent No. 6217883).

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The claim limits the immunogen to an inactivated porcine parvovirus.

The significance of Ng et al. is discussed above. To summarize, Ng et al. teaches a vaccine formulation.

Ng et al. does not teach an inactivated porcine parvovirus.

However, Allan et al. teaches inactivated porcine parvovirus and its use in a vaccine formulation for use against the porcine multisystemic wasting syndrome (PMWS).

One of ordinary skill in the art at the time the invention was made would have been motivated combine the teaching of Ng et al. and Allan et al. to produce a vaccine that comprises an inactivated porcine parvovirus to provide treatment against the porcine multisystemic wasting syndrome (PMWS).

One of ordinary skill in the art at the time the invention was made would have had a reasonable expectation of success for combining Ng et al. and Allan et al. because Ng et al. teaches the vaccine formulation and Allan et al. teaches the use of inactivated porcine parvovirus in a vaccine formulation for use against the porcine multisystemic wasting syndrome (PMWS).

Therefore, one of ordinary of ordinary skill in the art at the time the invention was made would have had a reasonable expectation of producing the claimed invention, absent unexpected results to the contrary.

Conclusion

No claim is allowed. 9.

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10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emily Le whose telephone number is (571) 272 0903. The examiner can normally be reached on Monday - Friday, 8 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Housel can be reached on (571) 272-0902. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

> Jeffrey S. Parkin, Ph.D. Primary Patent Examiner

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E.Le